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10/031,344	05/10/2002	Yoshiki Wakizaka	037267-0142	6436

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EXAMINER	
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ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/031,344	WAKIZAKA, YOSHIKI	
	Examiner	Art Unit	
	Donald L. Mills	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,4-6,8 and 10-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,4-6,8 and 10-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2, 4-6, 8, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benveniste (US 5,513,379), hereinafter referred to as Benveniste, in view of Gitlin et al. (US 5,442,525), hereinafter referred to as Gitlin.

Referring to claims 2 and 8, Benveniste discloses a cellular system (Referring to Figure 3, and respective portions of the spec.) including:

At least two base stations (Referring to Figure 3, ref. sign 300 and respective portions of the spec.),

A mobile station (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *making communication with one or more of said base stations over a plurality of channels at the same time* (Referring to Figure 3, ref. sign 300 and respective portions of the spec. CDMA, col. 1 lines 55-67. Channels are assigned to call requests which are accepted. See column 6, lines 56-61); and

A host station (Referring to Figure 3, ref. sign 305 and respective portions of the spec.) *controlling* (control, col. 6 lines 12-25) *communication made between said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *and said mobile station*

over a plurality of CDMA channels (Referring to Figure 3, ref. sign 301 and respective portions of the spec.),

Characterized in that when one of said base stations (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *becomes saturated* (interference, col. 6 lines 40-50), *said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *stops communication on one or more CDMA channels of said one base station, and begins communication on a corresponding number of CDMA channels of one or more other base stations, while still communicating using at least one channel of said one base station* (CDMA, col. 1 lines 55-67. Channel, col. 6 lines 30-50. Further, once allocated channels are exhausted, in a busy state, the call attempts to borrow channels form those allotted to the base stations of neighboring cells in a specified order. Since this is part of a call-handoff system, communication between the mobile unit and the base stations for the completion of the transition from one base station to another. See column 3, lines 50-56 and column 4, lines 32-34. Additionally, Benveniste relates to a method and system during roaming for hand-off, comprising smooth handoff, although not explicitly stated (See column 2, lines 24-28 and column 4, lines 32-34,) in which multiple base stations communicate with the mobile user to prevent the call from being dropped. The Examiner cites Chheda et al. (US 6,151,512), hereinafter referred to as Chheda, as evidence concerning the operation of smooth handoff as being part of the established and known process of handoff (See column 7, lines 12-34.) Benveniste discloses the concept of hand-off which comprises smooth handover, which was well established at the time as evidenced by Chheda.)

Benveniste does not disclose *a multi-code CDMA system.*

Gitlin teaches a multi-code division multiple access system, which allows a user at a radio transmitter unit to dynamically change its source bit rate (See column 3, lines 31-41.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the multi-code CDMA system of Gitlin in the system of Benveniste. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to comply with the well-known standard of multi-code CDMA as taught by Benveniste (See column 1, lines 55-67.)

Referring to claims 4, 5, 10, and 11, Benveniste discloses *a cellular system* (Fig. 3 and respective portions of the spec.) *including at least two base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.);

A first mobile station (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *making communication with one or more of said base stations over a plurality of CDMA channels at the same time* (Referring to Figure 3, ref. sign 300 and respective portions of the spec. CDMA, col. 1 lines 55-67. Channels are assigned to call requests which are accepted. See column 6, lines 56-61)*; and*

A host station (Referring to Figure 3, ref. sign 305 and respective portions of the spec.) *controlling communication made between said base stations and said mobile station over said plurality of CDMA channels* (Referring to Figure 3, ref. sign 301 and respective characterized in that one of said base stations (Referring to Figure 3, ref. sign 300 and respective portions of the spec.), *an receipt of a request from a second mobile station to start communications over n channels, where n is an integer equal to or greater than 2, checks whether n channels are*

available and transmits the result of checking to said host station (Referring to Figure 3, ref. sign 301 and respective portions of the spec and ref. sign 305 and respective portions of the spec.),

Said host station (Referring to Figure 3, ref. sign 305 and respective portions of the spec.) *receives said result from said one of said base stations,*

If n channels are available, said host instructs said one of said base stations to start making communication with said second mobile station using n channels (reserved, col. 4 lines 1-54), *instructs said one of said base station* (Referring to Figure 3, ref. sign 300 and respective portions of the spec., reserved, col. 4 lines 1-54),

If only m channels are available, where m is an integer smaller than n, said host instructs said one of said base stations to start making communication with said second mobile using m channels and further instructs one or more stations to start making communication with said second mobile station using (n-m) channels, and said second mobile station makes communication with said one of said base stations using m channels, and further makes communication with said one or more other base stations using (n-m) channels (CDMA, col. 1 lines 55-67. Channel, col. 6 lines 30-50. Note, the Examiner interprets the second mobile unit as the mobile unit in the state of requesting channels when the allotted channels have been exhausted. Further, once allocated channels are exhausted, in a busy state, the call attempts to borrow channels form those allotted to the base stations of neighboring cells in a specified order. If the channel sought for use is already in use or reserved by the owner cell or one of its neighbors, the channel is reserved, and the outstanding reservation is granted. See column 3, lines 50-56 and column 4, lines 26-34.)

Benveniste does not disclose *a multi-code CDMA system.*

Gitlin teaches a multi-code division multiple access system, which allows a user at a radio transmitter unit to dynamically change its source bit rate (See column 3, lines 31-41.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the multi-code CDMA system of Gitlin in the system of Benveniste. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to comply with the well-known standard of multi-code CDMA as taught by Benveniste (See column 1, lines 55-67.)

Referring to claim 6, the primary reference further teaches *the cellular system as set forth in claim 4 or 5, wherein said at least two base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *have an adaptive array antenna* (Fig. 2 ref. signs 201, 202, 203, 204 and 205 and respective portions of the spec.).

Referring to claim 12, Benveniste discloses the method as set forth in claim 10 or 11, *wherein said base station(s)* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *have adaptive array antenna* (Fig. 2 ref. signs 201, 202, 203, 204 and 205 and respective portions of the spec.).

Response to Arguments

3. Applicant's arguments filed 12 February 2007 have been fully considered but they are not persuasive.

4. On page 10 of the remarks, regarding claims 2, 4, 5, 8, and 10, the Applicant argues neither Benveniste nor Gitlin disclose, teach, or otherwise make obvious *transmitting channels to different base stations at the same time.* The Examiner respectfully disagrees. Benveniste

relates to a method and system during roaming for hand-off, comprising smooth handoff, although not explicitly stated (See column 2, lines 24-28 and column 4, lines 32-34,) in which multiple base stations communicate with the mobile user to prevent the call from being dropped or a hard handoff (As further evidenced by Chheda et al., US 6,151,512, see column 7, lines 12-34.) Benveniste discloses the concept of hand-off which comprises smooth handover, which was well established at the time as evidenced by Chheda. Therefore, with this understanding in mind Benveniste discloses *transmitting channels to different base stations at the same time.*

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Donald L Mills
DLM
May 10, 2007

Seema S. Rao 5/14/07
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